

REMARKS/ARGUMENTS

1. In the above referenced Office Action, the Examiner rejected claims 1-8, 10-14, 25-31, and 35-39 under 35 USC § 102 (b) as being anticipated by Chang (U.S. Patent No. 6,501,785); and claims 9, 15-24, 32-34, and 40 under 35 USC § 103 (a) as being unpatentable over Chang (U.S. Patent No. 6,501,785) in view of Salonaho (U.S. Patent No. 6,574,485). In addition, the Examiner indicated that the oath or declaration is defective and a post office address was not provided. These rejections have been traversed and, as such, the applicant respectfully requests reconsideration of the allowability of claims 1-40.

2. The oath or declaration is defective and a post office address was not provided and the citizenship was not provided. Attached herewith is a corrected declaration.

3. Claims 1-8, 10-14, 25-31, and 35-39 have been rejected under 35 USC § 102 (b) as being anticipated by Chang (U.S. Patent No. 6,501,785). The applicant respectfully disagrees with the Examiner's characterization of the present claims in view of the prior art cited.

Chang teaches a dynamic frequency hopping system 101 that includes a dynamic frequency hopping management device 340 that is connected to the network 102 and a database 342. The dynamic frequency hopping management device 340 receives information (detected or generated) as well as frequency hopping patterns from all of the base stations 110-114. The dynamic frequency hopping management device 340 provides for optimum estimated system performance by reviewing each of the frequency hopping patterns to verify

whether a different frequency hopping pattern may be assigned to improve system performance. (column 9, line 64, - column 10, line 9) The system 101 also includes terminals 134-136. The dynamic frequency hopping management device 340 may determine the new frequency hopping pattern by the methods of Figure 7 and figure 10.

In contrast with the present invention as is claimed in claim 1, Chang does not teach or suggest determining, by an access point, interference on a current wireless channel of a plurality of wireless channels. Chang, however, does teach that a dynamic frequency hopping management device 340 uses an SINR value (figure 7) of a channel to determine whether it is above a threshold and, if not, it is flagged to be removed from an active link. Chang further teaches that the SINR is calculated based on equation 1 of column 6, where the numerator represents the power received by the receiver when receiving signals over the link i and the denominator represents the sum of all of the interfering powers received by the receiver. (column 6, lines 29 - 50)

Chang further teaches that when a request for a link for the terminal is received, the base station 112 may allocate wireless communication resources to the link based on a resource allocation technique. Instead of a single frequency or channel, a frequency hopping pattern is allocated that optimizes the system. The dynamic frequency hopping system assigns the frequency hopping pattern to the terminal 134 based on the techniques applied to the channels. (column 3, lines 11 - 27) A frequency hopping exemplifying among channels is shown in Figure 2. As such, Chang teaches that a link on which a wireless communication

is supported includes a plurality of channels, or frequencies, that are hopped between based on a pattern.

Further, Chang does not teach or suggest interpreting, by the access point, the channel spectrum information to determine a desired wireless channel of the plurality of wireless channels. Chang, however, teaches that the dynamic frequency hopping management device determines which frequencies should not be included in a frequency hopping pattern for a link. Further, Chang teaches that the dynamic frequency hopping management device determines a new frequency hopping pattern for a link when it includes a frequency in its pattern that renders the pattern non-optimal.

For the foregoing reasons, the applicant believes that claim 1 overcomes the present rejection.

Since each of claims 2 - 8 are dependent upon claim 1 and introduce additional patentable subject matter, the applicant believes that the reasons that distinguish claim 1 over the present rejection is applicable in distinguishing claims 2 - 8 over the same prior art.

The applicant believes that the reasons that distinguish claim 1 over the present rejection are applicable in distinguishing claims 10-14, 25-31, and 35-39 over the same prior art.

4. Claims 9, 15-24, 32-34, and 40 have been rejected under 35 USC § 103 (a) as being unpatentable over Chang (U.S. Patent No. 6,501,785) in view of Salonaho (U.S.

Patent No. 6,574,485). The applicant respectfully disagrees.

The applicant believes that the teachings of Chang fail to teach one or more core aspects of the present claimed invention. Thus, combining the teachings of Chang with Salonaho fails to render the present claims obvious.

For the foregoing reasons, the applicant believes that claims 1-40 are in condition for allowance and respectfully request that they be passed to allowance.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present invention.

RESPECTFULLY SUBMITTED,

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CERTIFICATE OF MAILING

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